GOVERNMENT OF INDIA
ENVIRONMENT, FORESTS AND CLIMATE CHANGE
LOK SABHA

UNSTARRED QUESTION NO:2701
ANSWERED ON:10.05.2016
Melting of Glaciers
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Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

(a) whether the Government has conducted or proposes to conduct any study with regard to melting of glaciers;
(b) if so, the details and outcome thereof;
(c) whether there is any correlation between natural disasters including the Kedarnath disaster and melting of glaciers;
(d) if so, the details thereof and the reaction of the Government thereto; and
(e) the details of policy and action plan adopted by the Government to control the melting of glaciers?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI PRAKASH JAVADEKAR)

(a) & (b): In a collaborative project with Ministry of Environment, Forest & Climate Change (MoEF&CC), Indian Space Research Organisation (ISRO) has carried out mapping of Himalayan glaciers using Indian satellite data during 2004 to 2007. The study shows that there are 34,919 glaciers spread over 75,779 sq. km. in Indus, Ganga and Brahmaputra basins covering Himalaya and Trans-Himalaya including Karakoram region. Further, ISRO has monitored the glacier advance and retreat of 2018 glaciers, across the Himalayan region using satellite data of 2000-01 to 2010-11. The study shows that 87% of glaciers showed no change, 12% glaciers retreated and 1% glaciers have advanced. Himalayan glaciers are being further monitored as part of a new project entitled "Integrated Studies of Himalayan Cryosphere using Space based inputs and Impact Assessment due to Climate Change" funded by the Department of Space.

(c) & (d): As per the information received from Geological Survey of India, natural disasters like Kedarnath disaster cannot be directly attributed to the melting of glaciers. Kedarnath disaster could be the combined result of very heavy rainfall on two consecutive days and subsequent bursting of the 'Chorabari or Gandhi Sarovar' lake which was located between the valley wall and the lateral moraine of the glacier.

(e): The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) under National Action Plan on Climate Change (NAPCC) encompasses conservation measures for sustaining and safeguarding the Himalayan glaciers and mountain ecosystems through establishment of monitoring network, promotion of community based management, human resource development, and strengthening regional cooperation. Major initiatives taken under NMSHE include creation of four Thematic Task Forces on Himalayan Agriculture, Traditional Knowledge systems, Forest Resources and Plant Diversity, and Fauna and Wildlife Habitats. Also, State Climate Change Centres have been set up in the seven Himalayan states, namely, Jammu and Kashmir, Himachal Pradesh, Manipur, Mizoram, Tripura, Sikkim and Meghalaya.

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